	KOUTIN	y ANU	RECUK	D SHEET			
UBJECT: (Optional)				DD/A Registry			
		Rest	ricted	Access Processor 83-1433//			
ROM:			EXTENSION	No. Ref: DDA 83-1433			
Director of Securit	ty			DATE			
4E-60 Headquarters				8 JUN 1983			
O: (Officer designation, room number, and vilding)	DATE		OFFICER'S	COMMENTS (Number each comment to show from who			
	RECEIVED	PORWARDED	INITIALS	to whom. Draw a line across column after each comment			
1. EO/DDA 7D-24 Headquarters	NUL 6	B Grage	gu	Attached is a brief answer to DDA's recent question about Restricted Access Processor.			
ADDA 7D-24 Headquarters		9 1081	2				
3. DDA 7D-24 Headquarters	1 0 J	JN 1983					
4	10/	83	Gr	Att			
5.							
6.				10-10			
7.							
8.		 					
9.				·			
0.							
11.				_			
2.							
3.							
14.							
15.				-			
				OS 3 1470/A			

FORM 610 USE PREVIOUS EDITIONS



	RC	OUTING AND	RECORD	SHEET				N.
UBJECT: (Optional)					reasts die			
1982 Mitre Repo	rt ()	Contract of the second	EXTENSION	NO. DDA	83-1433			
ROM: Harry E. Fitzwa Deputy Director	ter for Adminis	tration		DATE 2 Ju	me 1983		ST.	ΑŢ
Deputy Director 7D 24 Hqs	IOI Addition		şisi 	THE RESIDENCE OF THE SECOND	5 A	omment to show	from whom	
TO: (Officer designation, ro	om number, and		OFFICER'S INITIALS	to whom.	(Number each c)raw a line across	column after ex	och comment.	
building)		RECEIVED FORWARDED		Bill:	100			
Director of Se	curity			1			is ST	AΤ
4E 60 Hqs 🔆			45777		wonder if of the wor	k Mitre is	doing	- an H
2.			1.00	on the Proces	"Restrict	ed ACCESS		
			24.3	Proces			ST	ं≹ AT
3. 77. 77. 77.								
	A CONTRACTOR		2/5					ر بر ا
								t a
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A CONTRACTOR			Att				S Y
			The Share Company					
6.								k .
7.								
	Anna Anna Anna Anna Anna Anna Anna Anna							1
8.						-		×
			333					表
10.	C Partie							
2 8 3 4 TO			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	**************************************				
型 11.								
								بذير ا
12.								
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The second se							•
13.								
14.						S REGISTRY		
			- 1		13450-1	3-1476	21	
15.	Service States					· · · · · · · · · · · · · · · · · · ·	2.4	

610 USE PREVIOUS EDITIONS

Local-Area Networks

Automated office equipment for word processing, data processing, mage distribution, graphics processing, and voice exchange is ecoming commonplace. Local-area networks can tie these functions together, providing data, voice, and video communications within and between buildings up to several miles apart. We are working on several local-area networks that can serve specific communications needs and support new automated office systems.

Broadband local-area networks are preferred because of their versatility and capacity for expanded service. We are developing and testing pilot and interim networks at Hanscom and Andrews Air Force Bases. Our work has also involved design and implementation of data communications gateways between these pilot networks and other networks, such as military and commercial telephone systems.

Although most of our work in the networking area is for the Air Force, at MITRE we have one of the largest operating local-area networks in existence—MITRENET. And we are designing two more: one for the Air Staff in the Pentagon, the other for the Canadian House of Commons in Ottawa.

National Aeronautics and Space Administration

In this time of reduced funding for space programs, NASA needs better, trimmer, data-handling systems for the 1990s. The systems must be flex-ble enough, and expandable enough, to cope with NASA's workbad, while minimizing life-cycle rosts.



This view of the Tigris-Euphrates valley and the Persian Gulf region was seen from the Space Shuttle orbiter Columbia during its third mission in March 1982. MITRE has supported the National Aeronautics and Space Administration in this program since its beginning, mainly in hardware acquisition, software development, and training for the network control centers.

NASA's data network will be significantly changed by 1985. The Tracking and Data Relay Satellite System (TDRSS) will have replaced most ground tracking stations. We are helping NASA develop long-term control facilities for the new TDRSS network by planning a network control center for operation in the mid-to late 1980s.

Satellite communications and tracking resources must also be made more secure in order to accommodate DOD missions in space. DOD and NASA are coordinating a security upgrade program including ground and spaceborne elements and involving mission planning, scheduling, and control systems. At Goddard Space Flight Center in particular, we are responsible for specifying security improvements. A key contribution

is development of the Restricted Access Processor, a computer used to isolate uncleared civilian users from classified information; the concept is largely based on computer security technology developed by MITRE.

With completion of the Shuttle Orbiter test program, NASA, and later DOD, will begin flying operational shuttle missions. Both NASA and DOD missions will be controlled initially by NASA facilities at the Johnson Space Center-with DOD missions under security controls. For the future, however, DOD plans a facility in Colorado Springs. There, the Air Force will plan and control space missions, develop Shuttle software, and train astronauts and flight controllers. Air Force and NASA systems will have sufficient commonality to permit